Organizational Form, Performance And Information Costs In Small Businesses

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Abstract

This extends agency theory to introduce organizational form as a decision variable that directly influences risk bearing and the costs of control in small businesses. Based on information cost and organization design theories, we propose a relationship between organizational form and information costs. Our empirical results reveal that organizational form is the first or second most important decision variable related to performance and information costs in small businesses.

Introduction

The objective of this study is to examine the impact of organizational form on the performance and information costs of small businesses. Previous studies, notably those using an agency theory perspective, have developed various propositions regarding the relative efficiency of different organizational forms (e.g., Fama and Jensen 1983a; 1983b). Those studies, however, have generally failed to focus on the primary needs of small business organizations. Other studies have examined the choice of organizational form for small businesses using either a tax (e.g., Hulse and Pope 1996) or an information-cost perspective (e.g., Casson 1996), but lacked empirical evidence to test the consequences of the choice of organizational form on actual performance. Moreover, publications with a practitioner perspective (e.g., Brittin 1991; Bukics and Engle 1994; Steingold 1995) have recommended that small business owners select the appropriate organizational form to maximize business performance, but those recommendations were limited in their relevance because they were based mainly on experiential knowledge, and not supported by systematic empirical results.

In this paper we integrate those theoretical and practical perspectives. First, we apply and extend various theories on organizational form to the context of small businesses. Next, we develop hypotheses on how organizational form relates to small business performance, and on the implications of organizational form on the information costs faced by owners. Then, based on a sample of 3,404 small businesses, we test those hypotheses and make inferences to the overall population of small businesses in the U.S.¹ In the final section we summarize the results and discuss the theoretical and practical implications of the evidence presented here.

Research into factors that determine the growth and success of small businesses has been the topic of many recent studies (e.g., Bronson and Morgan 1998; Chaston and Mangles 1997; Kotey and Meredith 1997; Rue and Ibrahim 1998). In particular, some studies have been concerned with identifying

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factors that facilitate or hinder small business success as perceived by small business owners (e.g., Dennis 1992, Merchant and Ferreira 1985). Table 1 summarizes the ten most important business problems according to the owners' perceptions.

Table 1
Most Important Business Problems
as Perceived by Small Business Owners

Problem area	Mean (1=highest, 7=lowest)	Percent judged it critical
Cost of Health Insurance	1.93	61
Federal Taxes on Business Income	2.86	32
Cash Flow	2.97	30
Workers' Compensation Costs	2.98	40
Cost and Availability of Liability Insurance	3.02	33
Social Security Taxes	3.05	27
State Taxes on Business Income	3.24	27
Unreasonable Government Regulations	3.25	28
Property Tax/Rent Costs	3.26	24
Frequent Changes in Federal Tax Law	3.39	22

Source: Adapted from Dennis (1992, pp. 9-10)

These problems can be classified in two main groups: (a) financial problems and (b) legal or regulatory problems. The costs of labor (cost of health insurance and workers' compensation), financing (cash flow) and occupancy (property tax and rental costs) are the main perceived financial problems. Income tax (federal and state taxes on business income, frequent changes in federal tax law), worker taxes (social security taxes) and regulations (unreasonable government regulations) are the main perceived legal/regulatory problems. Moreover, small business owners perceive six out of the ten most important business problems as being legal or regulatory in nature. This study investigates whether organizational form -- a key determinant of the legal and regulatory issues faced by small business owners -- influences financial performance and information costs.

Agency Theory and Organizational Form

Research on the selection of the appropriate organizational form and its implications for organizational performance and survival received a renewed emphasis in the early 1980s with the development of agency theory (Fama and Jensen 1983a; 1983b). Concerned about the separation between "ownership" and "control," the agency theory literature developed numerous propositions about how large corporations could benefit from delegating decision control to expert, specialized managers (or agents, acting on behalf of shareholders) and still ensure that the organization would produce the results that the owners intended.

The primary emphasis of that literature has been on maximizing efficiency, by reducing the agency costs or costs of controlling the behavior of managers (agents). It has investigated how shareholders can structure, monitor and secure contracts with managers that will minimize the costs of control. Risk bearing is not a concern for shareholders, since they can diversify firm-specific risk by investing in other firms, but it is an issue for managers, as their human capital is inevitably linked to firm perform-

ance. Therefore, the agency literature has examined various incentive provisions that help align the interests of both parties. While this literature has been fruitful in explaining important empirical trends for large corporations in the last decade (such as leveraged buyouts, mergers and acquisitions, incentive compensation, etc.), it has not been as widely applied to the study of small businesses.

We posit that, from the small business owners' viewpoint, finding ways to reduce risk bearing is more important than minimizing the costs of control. Unlike the risk-neutral shareholder of a large corporation, the small business owner is primarily concerned about survival and bearing the risk of failure. For large firms, the agency framework is typically applied to study survival in terms of the ability to resist the threat of takeover; for small firms, we propose that agency theory can be used to examine the need to survive in terms of the ability of the business to avoid bankruptcy, and to preserve the personal wealth of the owner(s).

Survival is a major theme in the small business literature directed to both practitioners (e.g., Day 1993; Prentice-Hall 1993) and academicians (e.g., Dadzie and Cho 1989; Venkataraman et al. 1990), due to the very high incidence of bankruptcies and failures among small firms. It is estimated that approximately 53% of small businesses close within the first four years in existence; among those businesses, about half of the firms close during their first two years (Small Business Administration 1998). This evidence suggests that one of small business owners' main concern is to reduce their personal liability by sharing business risk with others. Risk bearing is significantly reduced when shareholders are not personally liable for the organization's debts, as is the case in the corporate form of organization. Even though an increased number of shareholders implies that decision control is diluted, and that more owners have rights to the residual claims from the business (i.e., dividends), it allows risk to be allocated to more owners. Allowing other owners to participate in the risk sharing may also facilitate raising capital, which is extremely relevant to small business survival (Hulse and Pope 1996).

Therefore, we extend agency theory to the context of small businesses with the following research proposition:

Financial performance is improved when small businesses select organizational forms that minimize risk bearing, even at the expense of increased costs of control.

Performance Measurement

Traditional approaches of performance measurement have focused on profit in order to assess how successful a business is in terms of increasing output (i.e., revenues) while still minimizing inputs (i.e., costs and expenses). Those approaches have also led to the concepts of efficiency (or the ability to control inputs for a given level of desired output) and productivity (the ability to generate output for a given level of investment). For example, according to the performance indicators developed by Dupont early in this century, efficiency is measured by the ratio of operating income to sales; productivity is measured by the ratio of sales to investment (Atkinson et al. 2001). The combination of those two measures leads to the computation of return-on-investment (ROI) or, depending on how investment is defined, return-on-equity (ROE). Comprehensive financial performance measures such as return on investment became popular as large organizations started decentralizing operations and diversifying into different lines of business (Johnson and Kaplan 1987). For potential investors, return on equity is a more useful measure to assess the rate of return offered to stockholders in exchange for their investment in the corporation, vis-a-vis other "risk-free" investments (Harrison and Horngren 1995, p. 573).

In this study, we had to consider which financial measures would be most appropriate for comparing the performance of small businesses. As presented above, traditional measures such as return on investment or return on equity depend on profit. This is a major problem for small business research, as previous studies have suggested that profit is not an appropriate measure of small business performance, for at least two reasons. First, the tax literature has shown that small business owners select reporting strategies to shift profits between the business income and the owners' personal income in such a way that total tax liability is minimized (Hulse and Pope 1996). So, rather than reflecting true efficiency, reported profits become a tax-driven decision. Second, while profit may be an appropriate performance indicator for large firms with older assets in place, it is a poor measure of performance for most small businesses because it is affected by historical costs and does not adequately capture the value of start-up firms (Smith and Watts 1992). As evidenced by National Survey of Small Business Finances (Ou 1990b), start-up firms represent a disproportionately high percentage of small businesses: approximately 30% of all small businesses have been in existence for less than ten years. That is one reason why previous small business research has pointed out the limitations of profit as a metric of performance (e.g., Keasey and Watson 1993, pp. 94-114).

Since profit did not seem appropriate to measure small business performance, we used sales revenues instead, as an outcome-based performance indicator. Sales are less subject to manipulation for tax reporting purposes and are not affected by the historical cost of inputs. Previous research in small business has emphasized sales as a measure of performance (e.g., Chaston and Mangles 1997; Dadzie and Cho 1989; Venkataraman et al. 1990).

In addition, we chose to measure profit indirectly, through total owners' equity, which comprises initial capital investments and retained earnings. Owners' equity is a performance measure of particular relevance to entrepreneurs because it represents how the owners' ongoing investment of financial and human capital in the firm contributes to their increased wealth. Owners' equity is also a primary factor in determining credit access for small businesses, as it influences the financial stability of the business (Haynes 1996).

Therefore, after considering the abnormal behavior of profit as a performance indicator, we used sales and equity as two of the most comprehensive financial measures of performance for small businesses.²

Information Cost Theory

Another theory relevant to small businesses concerns the costs of information gathering and processing. Previous research on performance measurement and control in small businesses has documented that small business owners consider expertise, time, and rapid growth among the main constraints faced by small businesses (Merchant and Ferreira 1985). Those constraints are closely related to the ability of small business organizations to collect and process information. In this study we use information cost theory to investigate the impact of organizational form on the information costs facing small businesses.

While transaction cost theory (Coase 1937; Williamson 1985; Guenther 1992) helps explain why some firms grow and diversify, information cost theory focuses on the costs of using information for decision-making inside the firm (Casson 1996). Information costs tend to increase with increases in the quantity and complexity of information necessary to make decisions, as well as the number of stages

that information needs to go through before a decision is reached.

Prior research in small business literature has applied information cost theory to explain the choice between autocratic and consultative managerial styles (Casson 1996). In this study we focus on whether organizational form is related to information costs. When decision making is centralized in the hands of a sole owner-manager, we expect information costs to be relatively small. This not only contributes to efficient decision making processes (because other people in the firm do not need to be consulted) but also allows the small business the flexibility to respond quickly to changes in its environment. As organizational forms change and become more complex, so does the need for more specialized knowledge that transcends the skills of a sole owner-manager. The volume and complexity of information increases, leading to more steps in the decision-making process. More complex and formal rules for decision making are established, and more consultation with teams of specialists need to take place within the firm. Therefore, we expect information costs to be higher in the corporate form of small business organization (with its board of directors, formal shareholder meetings, etc.) than in organizations controlled by the sole owner-manager.

In order to measure information costs, we needed variables that could capture information volume and complexity. We found substantial evidence in the compensation literature relating total assets to information volume and complexity. For example, Gaver and Gaver (1993, p. 130) show that higher levels of total assets (scope of operations) are associated with higher compensation payments because higher asset levels represent greater demands imposed on managers to process a higher volume and complexity of information.

Furthermore, we also used total expenses as a measure of information costs. As discussed previously, most small firms operate labor-intensive businesses; total expenses for a small business thus reflect the number of employees in the organization. As expenses and the corresponding number of employees increase, so does the level of complexity in the organizational hierarchy. According to the classic work by Galbraith (1980) and a long tradition of organization design studies (as reviewed in Robey 1986), more complex organizational hierarchies have higher levels of information complexity. More of the employees' time, information processing equipment and other resources have to be devoted to transmitting and processing the information necessary to handle the coordination, scheduling and resource allocation decisions required by the organization's hierarchy. In addition, total expenses also reflect the volume and complexity of decisions related to non-labor resources, such as handling of inventories, equipment, and facility-sustaining activities.

Small Business Organizational Forms

Small businesses are typically organized as sole proprietorships, partnerships, S-corporations and C-corporations (for more detail, see Olmi 1991; Schwarz and Lathrope 1991; Steingold 1995). Proprietorship is the dominant form (approximately 72%), followed by corporation (21%) and partnership (about 7%) (SBA 1996). As summarized in Table 2, each organizational form available for small businesses offers different advantages and disadvantages with respect to the following: (a) costs of control, (b) risk bearing implications, and (c) income tax treatment.³

Table 2
Summary Comparison Among Small Business Organizational Forms

Organizational Form	Costs of Control	Risk Bearing	Tax Treatment
Sole Proprietorship	Lowest	Highest	Single taxation
Partnership	Low	High	Single taxation
S-corporation	High	Low	Single taxation
C-corporation	Highest	Lowest	Double taxation

Sole Proprietorship

A sole proprietorship is owned and operated by a single individual. Since decision control is centralized in the hands of the sole owner-manager, the costs of control are minimal. However, risk bearing is the highest among organizational forms available for small businesses.

The owner of a sole proprietorship has an unlimited personal liability for business debts; not only are his/her business income and property liable, but also his/her personal income and property are at stake in case of business failure, malpractice law suit, etc. Risk bearing, therefore, is concentrated in the person of the entrepreneur.

For income tax purposes the owner and the business are one entity (single taxation): only the owner is taxed on the business income and the business pays no income tax beyond what the owner pays. Losses and some personal expenses are deductible, within limits applicable to individual taxpayers. The owner is responsible for taxes on profits from the business, together with any other income he/she may have. There is no possibility of income deferral, for all income received in a particular year has to be reported as income by the owner in that same year.

Partnership

A partnership is an association of two or more persons as co-owners to do business. Compared to sole proprietorships, partnerships represent relatively higher costs of control, but not as high as in the corporate form. Risk bearing is lower than in the sole proprietorship, because risk can be shared among various partners.

Costs of control in the partnership occur because the partners may have diverging interests; there may also be more separation between ownership and control, as more managers may be hired who do not own any part of the business capital. The partnership agreement usually assumes that each partner has a "fiduciary" responsibility to the other partners: each partner owes the others the highest legal duty of good faith, loyalty and fairness in partnership matters.

Risk bearing is distributed among the partners, but at least one partner is personally liable for all business debts. Any partner can take actions that legally bind the business. In the special case of limited partnerships, the limited partners risk only the investment they made, as long as they do not participate in the management of the business. The general partners continue to have unlimited personal liability. From the general partners' viewpoint, the limited partners offer more capital without participation in the business decisions, but they also cause ownership to be diffused among more partners.

From the limited partners' viewpoint, participation in the profit with limited personal risk is the biggest advantage (compared to the risk faced by the general partners).

For income tax purposes the partners are taxed on all profits of the business and may deduct losses and some personal expenses. The partnership pays no income tax. The partners, like the owners in the sole proprietorships, pay taxes on profits from the business, together with any other personal income they may have, without being able to defer income.

S-Corporation

An S-corporation is a small business organization that is a separate and distinct entity from its owners, the shareholders. The costs of control are higher while risk bearing is lower than in proprietorships and partnerships. Decision control is more costly as supervision and monitoring is harder to implement. Different types of agents are involved, and each agent has a very specific role (e.g., incorporators, directors, officers and other managers).

Risk bearing is significantly reduced in S-corporations, compared to proprietorships and partnerships. Shareholders share the business risk and are not personally liable for debts of the corporation. All they can lose is their business investment. On the other hand, if a shareholder personally guarantees a business loan for the corporation, or if he/she commits wrong doing while personally performing a business activity of the corporation, as director, officer, or employee, he/she may respond personally for the debts and results of the actions of the corporation.

For income tax purposes the shareholders are taxed on all profits of the business and may deduct losses and other personal expenses. Single taxation is preserved in the S-corporation as it is in proprietorships and partnerships. The S-corporation pays no income tax, while its shareholders pay personal taxes on the business income (proportional to their stock ownership) together with any other income they may have. Income may not be deferred from year to year, for the profits of the S-corporation in one year have to be distributed as dividends to the shareholders in the same year.

C-Corporation

A C-corporation is a business organization that is a separate and distinct entity from its owners, the shareholders. Among all organizational forms available for small businesses, the C-corporation has the highest costs of control, but the lowest risk bearing for the owners. Dilution of ownership, combined with contracts with numerous agents, increase the agency costs. This is reflected in the various legal requirements for the C-corporation regarding the formalities of its corporate operations, such as the need for a board of directors and shareholder meetings, nomination of officials, etc. The C-corporation may also need additional federal and state paperwork related to federal securities laws.

Risk bearing is minimized in the C-corporation, since its many owners share the business risk and are not personally liable for the debts of the corporation. In professional corporations, the shareholders are not personally liable for malpractice of the other shareholders.

For income tax purposes both the C-corporation and the owners are taxable entities (double taxation). The C-corporation pays taxes on its profits, and the shareholders pay taxes on dividends received. The C-corporation can, within reasonable limits, defer the distribution of profits as dividends.

Fringe benefits are deductible as business expenses, according to the limits set by the IRS.

The disadvantages of double taxation have been the subject of extensive studies in the tax literature (e.g., Guenther 1992; Scholes and Wolfson 1992). But those disadvantages may be circumvented by careful selection of appropriate profit-reporting strategies (Hulse and Pope 1996). For example, if the individual tax rates are lower than the corporate rate, C-corporations may shift income from the corporation to its owners' personal income, via payments of salaries and bonuses, subject to the limitations in the tax regulations. Alternatively, if the corporate rate is lower than the individual tax rates, the corporation may also retain most of its profits as equity and postpone dividend payments. The longer the dividend distribution is postponed, the lower will be its value and the lower will be the consequent tax liability.⁴

The complexity associated with the numerous rules governing the different types of organizational forms is in itself a problem for small business owners. A lack of understanding of the practical implications of those rules may pose some serious complications. For example, a business can easily lose its S-corporation status if its owners engage in transactions that make the business ineligible for such status, such as creating shares of different types, selling existing shares to foreigners, etc. Such complexity is perhaps the main reason why most small businesses have organized as sole proprietorships, for these are the simplest organizational forms.

Research Hypotheses and Variables

Using the previously examined theoretical framework, we developed five hypotheses in order to investigate whether organizational form is related to the performance and information costs of small businesses. A summary of the research hypotheses and their relationship to the theories discussed earlier in this paper appears in Figure 1.

The extension of agency theory to the small business context and the performance measurement issues presented in this paper lead us to the first two hypotheses:

H1: The organizational form of a small business is positively associated with its total sales.

H2: The organizational form of a small business is positively associated with its owners' equity.

The costs of risk bearing are expected to exceed the costs of control for small businesses. In order to survive and succeed, the small business owner strives to reduce risk bearing even at the expense of increasing the costs of control. Therefore, organizational forms that reduce risk bearing are hypothesized to outperform those that expose owners to higher levels of risk.

As we compare different organizational forms for small businesses and move from proprietorship, to partnership, to S-corporation, and to C-corporation, we expect risk bearing to be reduced in exchange for increased costs of control (see Table 2). Financial performance is expected to improve, measured by total sales and total equity (which increases as retained earnings increase).

Moreover, based on the assertion that profit is not a good measure of small business performance, we also test whether organizational form is unrelated to profits by formulating the following hypothesis:

H3: The organizational form of a small business is not associated with its total profit.

Figure 1
Research Hypotheses and Theories

Given the tax and growth reasons discussed previously in this paper, small business profit is expected to be strongly determined by tax strategies and choices of accounting methods, and unrelated to differences in performance. Rather than a performance measure, profit is hypothesized to be the result of reporting method decisions that have the goal of minimizing total tax liability.

Finally, according to the information cost theory presented earlier in this paper, we propose the following hypotheses:

H4: The organizational form of a small business is positively associated with its total assets.

H5: The organizational form of a small business is positively associated with its total expenses.

As we compare different organizational forms for small businesses and move from proprietorship, to partnership, to S-corporation, and to C-corporation, we expect information costs to increase. Such an increase is related to the higher information volume and complexity necessary to manage larger total assets and total expenses.

The above hypotheses were tested by regressing the financial dependent variables on variables related to decisions made by the small business owner, variables related to the business life cycle, and variables related to ownership. Table 3 shows all the variables used in this study and how they were operationalized.

Decision variables. Four variables in this study represent decisions made by the small business owner: (1) type of organizational form (sole proprietorship, partnership, S-corporation, or C-corporation), which is the main independent variable being tested; (2) industrial sector (classified into eight different industries); (3) geographic region (classified into four regions); and (4) urban location (whether or not the small business is in a metropolitan statistical area). The industry and location (geographic and urban) variables are included to control for their potential effect on the financial dependent variables (see, for example, Dadzie and Cho 1989; Dennis 1992).

Business-life-cycle variables. Two variables that are subject to change along the business life cycle are included: (1) size (number of employees); and (2) business experience (age or years in operation). The need to control for those demographic variables is well documented in the small business literature (e.g., Bronson and Morgan 1998; Dadzie and Cho 1989; Dennis 1992; Geeraerts 1984; Weinzimmer 1997).

Ownership variables. Three variables that describe the type of ownership are considered: (1) family-owned (whether or not the business is controlled by a single family); (2) minority-owned (whether or not the business is controlled by non-whites and hispanics); and (3) male-owned (whether or not the business is controlled by males). Previous empirical research has shown that ownership variables are relevant to explain differences among small businesses (e.g., Cromie et al. 1995; Smeltzer and Fann 1989) and that they are related to financial performance (e.g., Dadzie and Cho 1989; Fasci and Valdez 1998; Shim and Eastlick 1998).

Those control variables were included in all the models to assess the extent to which performance and information costs are related to organizational form, compared to the impact of industry, location, size, age and type of ownership.

Table 3
Operationalization of the Variables

Dependent Variables	
Sales (SALES)	Total sales in dollars
Owners' Equity (EQUITY)	Total equity in dollars
Profit (PROFIT)	Total operating profit in dollars
Assets (ASSETS)	Total assets in dollars
Expenses (EXPENSES)	Total expenses in dollars (cost of goods sold plus operating expenses)
Independent Variables	
Decision Variables:	
Organizational Form (ORGFORM)	1 = sole proprietorship 2 = partnership 3 = S-corporation 4 = C-corporation
Industrial sector (INDUSTRY)	1 = mining 2 = construction 3 = manufacturing 4 = transportation, communications and public utilities 5 = wholesale trade 6 = retail trade 7 = insurance and real estate 8 = services
Geographic region (REGION)	1 = Northeast 2 = North Central 3 = South 4 = West
Urban location (URBAN)	1 = located in a Metropolitan Statistical Area 0 = located in a non-MSA county
Business Life-Cycle Variables:	
Size (SIZE)	Total full-time equivalent employees
Business Experience (AGE)	Number of years in operation
Ownership Variables:	
Family-owned (FAMILY)	1 = 50% or more owned by a single family 0 = less than 50% owned by a single family
Minority-owned (MINORITY)	1 = 50% or more owned by non-whites and hispanics 0 = less than 50% owned by non-whites and hispanics
Male-owned (GENDER)	1 = 50% or more owned by males 0 = 50% or more owned by females

Sample and Methodology

The source of the data for this study is the National Survey of Small Business Finance (NSSBF), a database developed by the Federal Reserve Board and the Small Business Administration, and frequently used by small business researchers (e.g., Haynes 1996; Ou 1990a and Ou 1990b). As described by Elliehausen and Wolken (1992), the survey is based on a stratified random sample of 3,404

small businesses and includes data on over 1,200 variables for each small business.

The frequency distributions of all the variables used in this study are shown in Table 4. It should be noted that the dependent variables (sales, equity, profit, assets and expenses) and some of the independent variables (size, age) were grouped into categories only for frequency distribution purposes. All analyses were conducted with these variables measured as interval-level variables. Table 4 shows the distributions for both the sample and for the population (weighted).

Table 4
Frequency Distributions

SALES (\$ 000's)		Frequency (n=3404)	Percent (sample)	Percent (weighted)
0 to <	50	369	10.8	11.8
50 to <	100	385	11.3	12.3
100 to <	250	753	22.1	25.8
250 to <	400	381	11.2	13.8
400 to <	700	320	9.4	10.4
700 to <	1,000	209	6.1	6.4
1,000 to <	10,000	762	22.4	17.5
≥ to	10,000	225	6.6	2.2
EQUITY (\$ 000's)		Frequency (n=3225)	Percent (sample)	Percent (weighted)
<	-100	70	2.2	1.8
-100 to <	0	183	5.7	6.2
0 to <	10	360	11.2	13.0
10 to <	30	543	16.8	20.0
30 to <	50	321	10.0	11.3
50 to <	100	495	15.3	16.3
100 to <	250	505	15.7	16.3
250 to <	500	265	8.2	7.6
500 to <	1,000	196	6.1	4.2
≥ to	1,000	287	8.9	3.3
PROFIT (\$ 000's)		Frequency (n=3237)	Percent (sample)	Percent (weighted)
<	-100	155	4.8	3.2
-100 to <	-10	245	7.6	7.7
-10 to <	0	223	6.9	7.6
0 to <	10	566	17.5	19.2
10 to <	20	361	11.2	12.1
20 to <	50	609	18.8	20.1
50 to <	100	382	11.8	13.2
100 to <	250	318	9.8	9.3
250 to <	1,000	234	7.2	5.6
≥ to	1,000	144	4.4	2.0

Table 4 (Continued)

ASSETS (\$ 000's)		Frequency (n=3404)	Percent (sample)	Percent (weighted)
0 to <	100	1461	43	51
100 to <	250	716	21.0	22.6
250 to <	400	277	8.1	8.8
400 to <	550	156	4.6	4.7
550 to <	1,000	204	6.1	5.0
1,000 to <	10,000	518	15.2	7.5
≥ to	10,000	72	2.1	.6

EXPENSES (\$ 000's)		Frequency (n=3238)	Percent (sample)	Percent (weighted)
0 to <	50	528	16.3	18.4
50 to <	100	407	12.6	13.8
100 to <	250	642	19.8	22.9
250 to <	400	316	9.8	11.8
400 to <	700	296	9.2	9.8
700 to <	1,000	169	5.2	5.5
1,000 to <	10,000	682	21.1	15.9
≥ to	10,000	198	6.1	1.9

ORGFORM	Frequency (n=3404)	Percent (sample)	Percent (weighted)
Proprietorship	1255	36.9	40.0
Partnership	274	8.0	8.3
S-Corporation	476	14.0	12.5
C-Corporation	1399	41.1	39.2

INDUSTRY	Frequency (n=3404)	Percent (sample)	Percent (weighted)
Mining	26	.8	.6
Construction	447	13.1	12.8
Manufacturing	408	12.0	9.2
Transportation, Communications and Public Utilities	117	3.4	3.0
Wholesale Trade	344	10.1	10.2
Retail Trade	930	27.3	25.6
Insurance and Real Estate	194	5.7	6.8
Services	938	27.6	31.7

REGION	Frequency (n=3404)	Percent (sample)	Percent (weighted)
Northeast	827	24.3	23.3
North Central	864	25.4	24.4
South	935	27.5	29.8
West	778	22.9	22.4

Table 4 (Continued)

URBAN		Frequency (<i>n</i> =3404)	Percent (sample)	Percent (weighted)
MSA		1613	47.4	76.3
Non-MSA		1791	52.6	23.7

SIZE (employees)		Frequency (<i>n</i> =3404)	Percent (sample)	Percent (weighted)
0	to <	2249	66.1	76.5
10	to <	347	10.2	11.8
20	to <	290	8.5	7.7
50	to <	284	8.3	2.4
100	to <	234	6.9	1.6

AGE (years)		Frequency (<i>n</i> =3404)	Percent (sample)	Percent (weighted)
1	to <	926	27.2	30.5
10	to <	1034	30.4	31.1
20	to <	518	15.2	15.0
30	to <	349	10.3	9.7
40	to <	200	5.9	4.7
50	to <	340	10.0	8.3
≥	to	37	1.1	.6

FAMILY		Frequency (<i>n</i> =3404)	Percent (sample)	Percent (weighted)
Family-owned		2896	85.1	85.8
Non-family-owned		508	14.9	14.2

MINORITY		Frequency (<i>n</i> =3404)	Percent (sample)	Percent (weighted)
Minority-owned		255	7.5	9.4
Non-minority-owned		3149	92.5	90.6

GENDER		Frequency (<i>n</i> =3404)	Percent (sample)	Percent (weighted)
Male-owned		2983	87.6	86.3
Female-owned		421	12.4	13.7

As a result of the stratified random sampling procedure, the sample has an over-representation of corporations, larger-size and older small businesses. In order to remove the bias introduced by the stratified random sampling procedure, the sample results had to be weighted for inference purposes. The weights used in this research to obtain population estimates were those included in the NSSBF database, as discussed in Cox et al. (1989, pp. 18-32). Whenever possible the analyses and results of this study were adjusted to provide population estimates using the procedures described in Norusis (1988, B41-B42).

In order to test the hypotheses, each of the financial variables (sales, equity, profit, assets and expenses) was regressed on organizational form and all control variables. The multiple regression equa-

tions were estimated using both the sample and the population (weighted) data. In the results section that follows we report adjusted R^2 , correlation and partial correlation coefficients for the population based on weighted data. As the weighting procedures affect substantially all tests of significance, we report significance of F (overall regression), T and significance of T for each coefficient based on the sample data only (see Appendices A and B).

Results

The predictions in H_1 and H_2 that organizational form is positively related to performance in small businesses are supported by the results in Table 5. Organizational form is the first most important decision variable related to sales and the second most important decision variable related to owners' equity. As discussed earlier in this paper, size and age are not decision variables for the owners, but consequences of the business life cycle. The strong correlation between size and sales is to be expected. For example, a chain of stores employing hundreds of people should outsell a neighborhood store employing a handful of people. Size is thus not a factor that per se explains performance measured by sales. Rather, size is a consequence of the business life cycle. Therefore, the relevant results in Table 5 are that decisions that often precede the beginning of operations concerning organizational form, industry and location (geographic region and urban) significantly determine the level of performance that the small business can achieve.

Another significant result in Table 5 is that the independent variables collectively explain -- as indicated by the adjusted R^2 -- more than one-fourth of the variance in total sales and more than one-fifth of the variance in total equity.

The assertion in H_3 , that the type of organizational form is not related to profit in small businesses, is also supported by the results in Table 5. Unlike the results shown in the previous two tables, where the independent variables explained a substantial percentage of the variation in the dependent variable, the regression model for profit explains less than four percent of the differences in profit. As discussed in this paper, the results confirm that small business profit is a tax-driven decision and not a good measure of small business performance.

Collectively, the empirical support for H_1 , H_2 and H_3 confirms the proposed small business agency theory relating organizational form to small business performance. Organizational form ranks as the first or second most important decision variable related to performance of small businesses.

The predictions in H_4 and H_5 that organizational form is positively related to information costs in small businesses are supported by the results in Table 6. Organizational form is the second most important decision variable explaining variations in total assets and the first most important decision variable explaining variations in total expenses. As happened with the performance models in Table 5, decisions regarding organizational form, industry and location, combined with business-life-cycle variables (size and age) explain over one-fifth of the variance in total assets and close to one-fourth of the variance in total expenses.

The empirical support for H_4 and H_5 confirms the proposed relationship between organizational form and information costs. Organizational form is the first or second most important decision factor determining information costs in small businesses.

Table 5
Results of Regressing Performance on Organizational Form and Control Variables

Dependent Variable = Sales

Independent Variable	Correlation Coefficient	Partial Correlation Coefficient
SIZE	0.509126	0.476467
AGE	0.104301	0.055629
ORGFORM	0.151597	0.028761
INDUSTRY	-0.063379	-0.027904
REGION	-0.049272	-0.021126
URBAN	0.034875	0.020458
FAMILY	-0.064852	-0.016648

Adjusted R² = 0.26616**Dependent Variable = Owners' Equity**

Independent Variable	Correlation Coefficient	Partial Correlation Coefficient
SIZE	0.467046	0.435325
AGE	0.128652	0.082048
INDUSTRY	-0.067827	-0.035948
ORGFORM	0.135749	0.030152
URBAN	0.022045	0.012273
REGION	-0.039565	-0.011220

Adjusted R² = 0.22792**Dependent Variable = Profit**

Independent Variable	Correlation Coefficient	Partial Correlation Coefficient
SIZE	0.173627	0.161363
FAMILY	-0.034370	-0.016740
INDUSTRY	-0.024740	-0.012745
AGE	0.029604	0.012210

Adjusted R² = 0.03098**Summary and Conclusion**

In this paper we proposed a small-business agency theory relating organizational form to performance. We showed why risk bearing is more important for small businesses than the costs of control: compared to large organizations, where efficiency is the main concern, small businesses are primarily striving to survive. We also introduced organizational form as a decision variable that most directly influences risk bearing. We identified sales and owners' equity as comprehensive measures of performance, and presented reasons why profit is a tax-driven decision rather than a performance indicator for small businesses.

Table 6
Results of Regressing Information Costs on Organizational Form and Control Variables

Dependent Variable = Assets

Independent Variable	Correlation Coefficient	Partial Correlation Coefficient
SIZE	0.444626	0.419847
AGE	0.076815	0.036363
INDUSTRY	-0.055552	-0.025405
ORGFORM	0.127162	0.024738
URBAN	0.028881	0.017234

Adjusted $R^2 = 0.20091$

Dependent Variable = Expenses

Independent Variable	Correlation Coefficient	Partial Correlation Coefficient
SIZE	0.489394	0.456482
AGE	0.111435	0.062762
ORGFORM	0.149793	0.033724
INDUSTRY	-0.057419	-0.024358
URBAN	0.034336	0.020735
REGION	-0.044322	-0.017472

Adjusted $R^2 = 0.24690$

We also proposed a relationship between organizational form and information costs for small businesses. We submitted that as organizational forms change and become more complex, both the volume and complexity of information increase. Drawing from the information cost and organization design theories, we selected assets and expenses as measures of information costs.

The empirical results provide strong evidence for those theoretical propositions. Organizational form is found to be the first or second most important decision variable explaining variations in performance. The independent variables selected for this study collectively account for over one-fifth of the total variation in small business performance. Organizational form also ranks as the first or second most significant decision variable associated with information costs. The independent variables used in the regression models explain 20 to 25% of the total variation in information costs facing small businesses.

Our results, based on the *population* of small businesses, confirm what other studies have suggested: sales and owners' equity are more relevant than profit as measures of performance.

For small businesses struggling against the odds to survive, this study suggests that key choices about organizational form, industry, and location can significantly explain performance. In fact, this

research shows that solid knowledge of the implications of the various organizational forms available to small businesses is essential for starting and managing a small business, because organizational form has a considerable connection with both performance and information costs.

The choice of organizational form for a small business is often delegated to outsiders, such as accountants, or lawyers, possibly under the assumption that it is a technical decision without much practical consequence for the business. This study provides evidence that such a decision should be made by fully-informed business owners, partners and shareholders, rather than delegated to outsiders.

Suggestions for Future Research

The small-business agency theory confirmed by the results of this study introduces organizational form as a much more significant factor related to small business performance than has been documented previously in the literature. While traditional approaches to performance measurement have focused on internal aspects of the organization (i.e., the relation of outputs to inputs), emerging approaches have extended the focus to factors that transcend the organizational boundaries (such as customer satisfaction, ability to compete and innovate). None of these approaches have paid adequate attention to the type of organizational form, yet organizational form has implications for both internal (e.g., hierarchy and structure) and external (e.g., relationships with investors, regulators and lenders) characteristics of the firm, and for actual performance.

In extending agency theory predictions beyond the realm of the large, publicly-traded organizations that have been the main focus of the agency literature, researchers need to be aware that the assumption that costs of control have to be minimized may not always hold true. For the case of small businesses we concluded that risk bearing was a major consideration; for other contexts, such as non-profit, or governmental organizations, other extensions of the agency theory framework may be required.

Endnotes

1. Small businesses in this study are those that have fewer than 500 employees, as defined by the Small Business Administration.
2. Nonfinancial performance measures such as customer satisfaction and internal business capabilities would be important additions to this study. Unfortunately, nonfinancial measures were unavailable in the database we used. While this is a limitation of this study, financial measures such as sales and owners' equity still represent relevant performance indicators. As Kaplan and Norton note, "The financial problems of some recent Baldrige Award winners give testimony to the need to link operational improvements to economic results" (1996, p. 150). Nonfinancial indicators must translate into financial performance, or the small business will fail.
3. Following previous studies (e.g., Guenther 1992; Fama and Jensen 1983b), organizational form in this study refers to the particular legal structure adopted by the small business.
4. Another organizational form, the limited liability company, combines the tax advantages of single taxation enjoyed by partnerships with the limited personal liability valued by corporate shareholders (Steingold 1995; Mancuso 1996). Its main drawbacks are the strict tax guidelines and the fact that it is not allowed in some states. This organizational form was created after the data for this study were collected.

Appendix A

Sample Results (Not Weighted) of Regressing Performance Measures on Organizational Form and Control Variables

Dependent Variable = Sales

Independent Variable	Φ	Significance Level
SIZE	37.030	0.0000
AGE	4.971	0.0000
URBAN	3.474	0.0005
INDUSTRY	-2.417	0.0157
ORGFORM	2.184	0.0290
FAMILY	-2.023	0.0432

Adjusted $R^2 = 0.34213$ Significance $F = 0.00001$

Dependent Variable = Owners' Equity

Independent Variable	Φ	Significance Level
SIZE	27.647	0.0000
AGE	7.832	0.0000
INDUSTRY	-3.535	0.0004
URBAN	1.785	0.0743
ORGFORM	1.712	0.0870

Adjusted $R^2 = 0.25066$ Significance $F = 0.00001$

Dependent Variable = Profit

Independent Variable	Φ	Significance Level
SIZE	11.430	0.0000

Adjusted $R^2 = 0.03882$ Significance $F = 0.00001$

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Appendix B
Sample Results (Not Weighted) of Regressing
Information Cost Measures on Organizational
Form and Control Variables

Dependent Variable = Assets

Independent Variable	β	Significance Level
SIZE	30.381	0.0000
AGE	3.873	0.0001
INDUSTRY	-3.224	0.0013
URBAN	2.882	0.0040
FAMILY	-1.722	0.0852

Adjusted $R^2 = 0.24180$

Significance $F = 0.00001$

Dependent Variable = Expenses

Independent Variable	β	Significance Level
SIZE	35.239	0.0000
AGE	4.845	0.0000
URBAN	3.596	0.0003
ORGFORM	2.551	0.0108
INDUSTRY	-1.950	0.0512

Adjusted $R^2 = 0.32950$

Significance $F = 0.00001$

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Notes